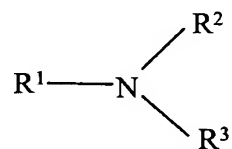


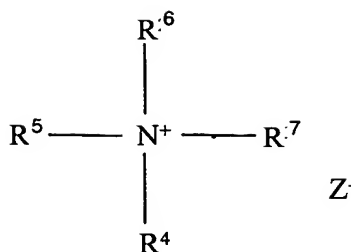
What is claimed is:

1. A high-strength herbicidal concentrate composition comprising: (a) water, (b)
 5 glyphosate, predominantly in the form of the monomethylamine or the dimethylamine salt, in solution in the water in an amount of greater than about 350 grams of acid equivalent per liter of the composition, and (c) at least one surfactant in a total amount of about 20 to about 200 grams per liter of the composition.
2. A composition of Claim 1 which contains greater than about 440 grams of
 10 acid equivalent of glyphosate per liter of the composition.
3. A composition of Claim 1 having a viscosity of less than 140 centipoise.
4. A composition of Claim 1 in which the surfactant is
 (a) an alkylamine or alkyletheramine surfactant having the chemical formula



- in which R¹ is a C₈ - C₂₄, preferably a C₁₂ - C₁₈, straight or branched chain, saturated
 15 or unsaturated hydrocarbyl group, optionally interrupted by one or more ether linkages, and R² and R³ are independently C₁ - C₄ alkyl, preferably methyl, groups or polyoxyalkylene chains having in total 2 to about 22 alkylene oxide units, preferably ethylene oxide units;

(b) a quaternary ammonium surfactant having the chemical formula



in which Z^- is an agriculturally acceptable anion such as chloride, bromide, iodide, sulfate or acetate and R^4 , R^5 , R^6 and R^7 include, without limitation, the following:

(i) R^4 is a benzyl or a $\text{C}_8 - \text{C}_{24}$, preferably a $\text{C}_{12} - \text{C}_{18}$, straight or
 5 branched chain, saturated or unsaturated hydrocarbyl group, optionally interrupted by one or more ether linkages, and R^5 , R^6 and R^7 are independently $\text{C}_1 - \text{C}_4$ alkyl, preferably methyl, groups;

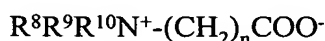
(ii) R^4 and R^5 are independently a $\text{C}_8 - \text{C}_{24}$, preferably $\text{C}_{12} - \text{C}_{18}$,
 straight or branched chain, saturated or unsaturated hydrocarbyl group, optionally
 10 interrupted by one or more ether linkages, and R^6 and R^7 are independently $\text{C}_1 - \text{C}_4$ alkyl, preferably methyl, groups;

(iii) R^4 is a $\text{C}_8 - \text{C}_{24}$, preferably $\text{C}_{12} - \text{C}_{18}$, straight or branched chain,
 saturated or unsaturated hydrocarbyl group, optionally interrupted by one or more
 ether linkages, R^5 is a polyoxyalkylene chain having about 2 to about 22, preferably
 15 about 2 to about 15, $\text{C}_2 - \text{C}_4$ alkylene oxide units, preferably ethylene oxide units, and
 R^6 and R^7 are independently $\text{C}_1 - \text{C}_4$ alkyl, preferably methyl, groups; or

(iv) R^4 is a $\text{C}_8 - \text{C}_{24}$, preferably $\text{C}_{12} - \text{C}_{18}$ straight or branched chain,
 saturated or unsaturated hydrocarbyl group, optionally interrupted by one or more
 ether linkages, R^5 and R^6 are polyoxyalkylene chains having about 2 to about 22,

preferably about 2 to about 15, C₂ – C₄ alkylene oxide units, preferably ethylene oxide units, and R⁷ is a C₁ – C₄ alkyl, preferably methyl, group;

(c) an amphoteric surfactant having the chemical formula

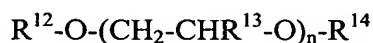


5 in which R⁸, R⁹, R¹⁰ and n include, without limitation, the following:

(v) R⁸ is a C₈ – C₂₄, preferably a C₁₂ – C₁₈, straight or branched chain, saturated or unsaturated hydrocarbyl group, and R⁹ and R¹⁰ are independently C₁ – C₄ alkyl, preferably methyl, groups or a hydrogen atom; and n is an integer between 1 to 5; or

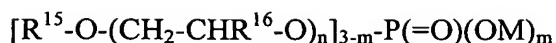
10 (vi) R⁸ is a [R¹¹-CONH-(CH₂)_x-] radical where R¹¹ is a C₈ – C₂₄, preferably a C₁₂ – C₁₈, straight or branched chain, saturated or unsaturated hydrocarbyl group, x is an integer between 1 to 5, and R⁹ and R¹⁰ are independently C₁ – C₄ alkyl, preferably methyl, groups or a hydrogen atom; and n is an integer between 1 to 5;

15 (d) an alcohol ethoxylate having the chemical formula



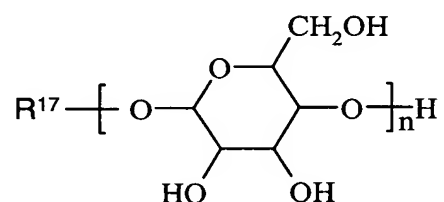
20 in which formula R¹² is a C₈ – C₂₄, preferably a C₁₂ – C₁₈, straight or branched chain, saturated or unsaturated hydrocarbyl group, R¹³ represents independently a hydrogen atom or a methyl or ethyl radical, preferably a hydrogen atom, n is an integer between 2 and 50, preferably between 10 and 30, and R¹⁴ is a C₁ – C₄ alkyl, preferably methyl, group or a hydrogen atom;

(e) an alcohol ethoxylate phosphate ester having the chemical formula



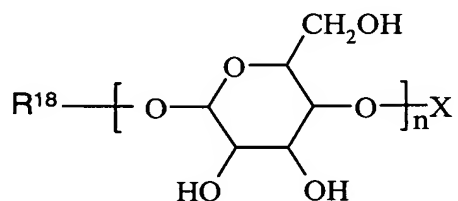
in which formula R^{15} is a $C_6 - C_{20}$, preferably a $C_8 - C_{18}$, straight or branched chain,
 5 saturated or unsaturated hydrocarbyl group, R^{16} represents independently a hydrogen
 atom or a methyl or ethyl radical, preferably a hydrogen atom, n is an integer between
 0 and 10, preferably in the range 2 to 10, M represents independently a hydrogen
 atom, an alkali or alkaline-earth metal, an ammonium or an alkylammonium ion, and
 m is a whole number in the range 1 to 2;

10 (f) an alkylpolyglycoside having the general chemical formula



in which the polyglycoside is derived from glucose or other mono-, di- or
 polysaccharides, n is the degree of polymerisation and is typically within the range
 from 1 to 3, and R^{17} is a $C_6 - C_{18}$, preferably a $C_8 - C_{10}$, straight or branched chain,
 15 saturated or unsaturated hydrocarbyl group;

(g) an anionic ester derivative of alkylpolyglycosides having the chemical
 formula



in which the polyglycoside is derived from glucose or other mono-, di- or polysaccharides, n is the degree of polymerisation and is typically within the range from 1 to 3, R¹⁸ is a C₆ – C₁₈, preferably a C₈ – C₁₀, straight or branched chain, saturated or unsaturated hydrocarbyl group, and X represents a carboxylate moiety
 5 derived from a bi- or tri-carboxylic acid, preferably citric, tartaric or sulfosuccinic acid ; or

(h) mixtures thereof.

5. A composition of Claim 4 in which the surfactant is a mixture of a blend of tallowamine ethoxylates and a blend of amphoteric surfactants having the formula



in which R⁸ is a C₁₂ – C₁₄ hydrocarbyl group, R⁹ and R¹⁰ are both CH₃ and n is 1.

6. A composition of Claim 5 in which the viscosity is less than 100 centipoise and which contains greater than about 480 grams of acid equivalent of glyphosate per liter of composition.

15 7. A method of controlling undesirable vegetation which comprises applying to the vegetation a water-diluted composition of Claim 1.